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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/073,225 | 02/13/2002 | Yasuo Tokitoh | 218197US0 | 4815 |
| 22850 | 7590 | 11/19/2003 | EXAMINER | |
| OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. | | | JOHNSON, EDWARD M | |
| 1940 DUKE STREET | | | ART UNIT | |
| ALEXANDRIA, VA 22314 | | | PAPER NUMBER | |

1754

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/073,225

Applicant(s)

TOKITOH, YASUO

Examiner

Edward M. Johnson

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4/02, 1/03. 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hirahara et al. US 6,064,560.

Regarding claims 1, Hirahara '560 discloses a carbon catalyst carrier (see column 2, lines 5-18) mixed, heated, and dried with 9g of potassium hydroxide in powder form (see Example 6).

Regarding claims 2-3, Hirahara '560 discloses 90 degrees (see Preparation Example 1) and 400-1000 degrees (see column 4, lines 9-13).

Regarding claim 4, Hirahara '560 discloses pores (see abstract).

Regarding claims 5-6, Hirahara '560 discloses silica gel (see column 1, lines 45-50).

Regarding claims 7-8, Hirahara '560 discloses coal (see column 1, lines 32-38).

Regarding claim 9, Hirahara '560 discloses potassium hydroxide (see Example 6).

Regarding claim 10, Hirahara '560 discloses a thickness of 0.5 mm (see column 5, line 29) and less than 10 mm (see Example 1).

Regarding claims 11-15, Hirahara '560 discloses 3g to 9g (Example 6), no diffraction peaks, and separation and filtration (see column 1).

4. Claims 1-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hamamatsu et al. US 5,811,611.

Regarding claim 1, Hamamatsu '611 discloses a method for making a catalyst comprising mixing potassium hydroxide and boehmite in a crucible, heating, drying, and cooling (see Example 1).

Regarding claims 2-15, Hamamatsu '611 discloses 80-200 degrees, pores, boehmite, potassium hydroxide, 6 mesh particle size, and 66 g to 60 g (see columns 7-8).

5. In the event any differences can be shown for the product of the product-by-process claims 1-15, as opposed to the product taught by Hirahara '560 and/or Hamamatsu '611, such differences would have been obvious to one of ordinary skill in the art at the time the invention was made as a routine modification of the product in the absence of a showing of unexpected results; see also *In re Thorpe*, 227 USPQ 964 (Fed.Cir. 1985).

6. Claims 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirahara '560.

Regarding claim 16, Hirahara '560 discloses a carbon catalyst carrier (see column 2, lines 5-18) mixed, heated, and dried with 9g of potassium hydroxide in powder form (see Example 6) under atmospheric pressure (see column 4, lines 30-32).

Regarding claim 17, Hirahara '560 discloses drying in carbon dioxide (see preparation example 2).

Regarding claim 18, Hirahara '560 discloses 90 degrees (see Preparation Example 1).

7. Claims 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hamamatsu '611.

Regarding claim 16, Hamamatsu '611 discloses a method for making a catalyst comprising mixing potassium hydroxide and boehmite in a crucible, heating, drying, and cooling (see Example 1) at a pressure (see column 7, lines 57-59).

Regarding claim 17, Hamamatsu '611 discloses air (see Example 1).

Regarding claims 18-19, Hirahara '560 discloses 80-200 degrees or 100-180 degrees (see column 7, lines 49-51).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirahara '560.

Hirahara fails to specifically disclose 200-400 degrees.

It is considered that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use 200-400 degree heating in the method of Hirahara because Hirahara discloses 400-1000 degrees (see column 4, lines 9-13),

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which would obviously, to one of ordinary skill, suggest that temperatures slightly below 400 are sufficient.

Conclusion


10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cheung et al. US 5,510,550 discloses a catalyst composition of alumina support and palladium and KOH (see abstract and Examples).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 703-305-0216. The examiner can normally be reached on M-F 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 703-308-3837. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

EMJ


STANLEY S. SILVERMAN
SUPERVISORY PATENT EXAMINER
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